

ABSTRACT OF THE DISCLOSURE

Residual chromatic dispersion in an optical transmission system is measured and compensated by utilizing the bit error rate for the system. A
5 predetermined amount of chromatic dispersion is introduced into receive end of the optical transmission system and the bit error rate is measured and associated with that predetermined amount of chromatic dispersion. The predetermined amount of chromatic dispersion is then changed to a new predetermined amount to reduce and, ultimately, minimize the bit error rate.
10 Total residual chromatic dispersion is then measured as the complement of the predetermined amount of chromatic dispersion that corresponds to the minimum bit error rate. At least some portion of the residual chromatic dispersion is compensated by introducing a fixed amount of dispersion in a range from 0 ps/nm to and including the predetermined amount of chromatic
15 dispersion that corresponds to the minimum bit error rate. In one exemplary embodiment, selection of the predetermined amount of chromatic dispersion is adaptively controlled to reduce the measured bit error rate.